

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A method for facilitating secure communication
2 between two networked devices, comprising:
3 establishing communication between a situation notification device and a
4 provisioning device over a preferred channel, wherein the preferred channel is
5 bidirectional, location-limited, has a demonstrative identification property and an
6 authenticity property, and does not require being resistant to eavesdropping;
7 wherein the demonstrative identification property allows a human
8 operator to be aware of which devices are communicating with each other
9 based on physical proximity; and
10 wherein the authenticity property makes it difficult or impossible
11 for attacking devices to tamper with or alter messages transmitted in the
12 preferred channel, or to insert false information into the preferred channel
13 without being detected by legitimate participants communicating via the
14 preferred channel;
15 prior to establishing the communication, pre-authenticating the situation
16 notification device to ensure that the situation notification device has physical
17 access to the preferred channel, wherein pre-authenticating the situation
18 notification device involves:
19 exchanging key commitment information between the provisioning
20 device and the situation notification device over the bidirectional preferred
21 channel;

22 exchanging keys between the provisioning device and the situation
23 notification device over a bidirectional channel which does not have to be
24 the preferred channel; and
25 verifying the received keys using the received key commitment
26 information on both the provisioning device and the situation notification
27 device;
28 providing provisioning information to said situation notification device
29 over said preferred channel, wherein said situation notification device is
30 automatically configured to receive subject matter information responsive to said
31 provisioning information;
32 receiving said subject matter information;
33 verifying said subject matter information with said provisioning
34 information; and
35 presenting said subject matter information to a user of the situation
36 notification device responsive to the step of verifying, wherein the step of
37 verifying ensures that the subject matter information is genuine.

1 2. (Previously presented) The method of claim 1, wherein the step of
2 providing further comprises:

3 exchanging key commitment information over said preferred channel
4 between said provisioning device and said situation notification device;
5 receiving a public key by said situation notification device;
6 verifying said public key with said key commitment information; and
7 receiving a credential authorized by a credential issuing authority.

1 3. (Previously presented) The method of claim 1, wherein said preferred
2 channel is a location-limited channel.

1 4. (Previously presented) The method of claim 1, wherein said preferred
2 channel uses a telephone switching system.

1 5. (Canceled)

1 6. (Previously presented) The method of claim 1, wherein subject matter
2 information is received using an antenna, a telephone line, a local area network, a
3 wide area network, a wireless network, or a broadcast network.

1 7. (Previously presented) The method of claim 1, wherein said situation
2 notification device is a computer, a television, a radio, a telephone, a push to talk
3 device, a pager, a clock, a thermostat, a network appliance, or a home appliance.

1 8. (Previously presented) The method of claim 1, further comprising
2 forwarding said subject matter information.

1 9. (Previously presented) The method of claim 1, wherein said subject
2 matter information is alarm information.

1 10. (Currently amended) A computer-readable storage medium storing
2 instructions that when executed by a computer cause the computer to present
3 subject matter information, the method comprising steps of:
4 establishing communication between a situation notification device and a
5 provisioning device over a preferred channel, wherein the preferred channel is
6 bidirectional, location-limited, has a demonstrative identification property and an
7 authenticity property, and does not require being resistant to eavesdropping;

8 wherein the demonstrative identification property allows a human
9 operator to be aware of which devices are communicating with each other
10 based on physical proximity; and
11 wherein the authenticity property makes it difficult or impossible
12 for attacking devices to tamper with or alter messages transmitted in the
13 preferred channel, or to insert false information into the preferred channel
14 without being detected by legitimate participants communicating via the
15 preferred channel;
16 prior to establishing the communication, pre-authenticating the situation
17 notification device to ensure that the situation notification device has physical
18 access to the preferred channel, wherein pre-authenticating the situation
19 notification device involves:
20 exchanging key commitment information between the provisioning
21 device and the situation notification device over the bidirectional preferred
22 channel;
23 exchanging keys between the provisioning device and the situation
24 notification device over a bidirectional channel which does not have to be
25 the preferred channel; and
26 verifying the received keys using the received key commitment
27 information on both the provisioning device and the situation notification
28 device;
29 providing provisioning information to said situation notification device
30 over said preferred channel, wherein said situation notification device is
31 automatically configured to receive said subject matter information responsive to
32 said provisioning information;
33 receiving said subject matter information;
34 verifying said subject matter information with said provisioning
35 information; and

36 presenting said subject matter information to a user of the situation
37 notification device responsive to the step of verifying, wherein the step of
38 verifying ensures that the subject matter information is genuine.

1 11. (Original) The computer-readable storage medium of claim 10,
2 wherein the step of providing
3 further comprises:
4 exchanging key commitment information over said preferred channel
5 between said provisioning device and said situation notification device;
6 receiving a public key by said situation notification device;
7 verifying said public key with said key commitment information; and
8 receiving a credential authorized by a credential issuing authority.

1 12. (Original) The computer-readable storage medium of claim 10,
2 wherein said preferred channel is a location-limited channel.

1 13. (Original) The computer-readable storage medium of claim 10,
2 wherein said preferred channel uses a telephone switching system.

1 14. (Canceled)

1 15. (Original) The computer-readable storage medium of claim 10,
2 wherein subject matter information is received using an antenna, a telephone line,
3 a local area network, a wide area network, a wireless network, or a broadcast
4 network.

1 16. (Original) The computer-readable storage medium of claim 10,
2 wherein said situation notification device is a computer, a television, a radio, a

3 telephone, a push to talk device, a pager, a clock, a thermostat, a network
4 appliance, or a home appliance.

1 17. (Original) The computer-readable storage medium of claim 10, further
2 comprising forwarding said subject matter information.

1 18. (Original) The computer-readable storage medium of claim 10,
2 wherein said subject matter information is alarm information.

1 19. (Currently amended) An apparatus comprising:
2 at least one port configured to establish a preferred channel, wherein the
3 preferred channel is bidirectional, location-limited, has a demonstrative
4 identification property and an authenticity property, and does not require being
5 resistant to eavesdropping;
6 wherein the demonstrative identification property allows a human
7 operator to be aware of which devices are communicating with each other
8 based on physical proximity; and
9 wherein the authenticity property makes it difficult or impossible
10 for attacking devices to tamper with or alter messages transmitted in the
11 preferred channel, or to insert false information into the preferred channel
12 without being detected by legitimate participants communicating via the
13 preferred channel;
14 a first communication mechanism configured to receive provisioning
15 information over said preferred channel, whereby the apparatus is configured to be
16 able to receive subject matter information responsive to said provisioning
17 information,
18 wherein the port is further configured to pre-authenticate the first
19 communication mechanism prior to receiving the provisioning information to

20 ensure that the first communication mechanism has physical access to the
21 preferred channel, wherein pre-authenticating the situation notification device
22 involves:
23 exchanging key commitment information between the provisioning
24 device and the situation notification device over the bidirectional preferred
25 channel;
26 exchanging keys between the provisioning device and the situation
27 notification device over a bidirectional channel which does not have to be
28 the preferred channel; and
29 verifying the received keys using the received key commitment
30 information on both the provisioning device and the situation notification
31 device;
32 a second communication mechanism configured to receive said subject
33 matter information subsequent to operation of the first communication
34 mechanism;
35 a verification mechanism configured to verify said subject matter
36 information with said provisioning information; and
37 a presentation mechanism configured to present said subject matter
38 information to a user of the situation notification device responsive to the
39 verification mechanism, wherein the step of verifying ensures that the subject
40 matter information is genuine.

1 20. (Original) The apparatus of claim 19, wherein the first communication
2 mechanism further comprises:

3 a key commitment receiver mechanism configured to receive key
4 commitment information through said at least
5 one port;
6 a key receiver mechanism configured to receive a public key;

7 a pre-authentication mechanism configured to verify said public key with
8 said key commitment information; and
9 a credential provisioning mechanism configured to be able to
10 automatically provide a credential authorized by a credential issuing authority
11 responsive to the pre-authentication mechanism.

1 21. (Original) The apparatus of claim 19, wherein said preferred channel is
2 a location-limited channel.

1 22. (Original) The apparatus of claim 19, wherein said preferred channel
2 uses a telephone switching system.

1 23. (Canceled)

1 24. (Original) The apparatus of claim 19, wherein subject matter
2 information is received using an antenna, a telephone line, a local area network, a
3 wide area network, a wireless network, or a broadcast network.

1 25. (Original) The apparatus of claim 19, wherein the apparatus is within a
2 computer, a television, a radio, a telephone, a push to talk device, a pager, a clock,
3 a thermostat, a network appliance, or a home appliance.

1 26. (Original) The apparatus of claim 19, further comprising a forwarding
2 mechanism configured to forward said subject matter information.

1 27. (Original) The apparatus of claim 19, wherein said subject matter
2 information is alarm information.

1 28. (Previously Presented) The method of claim 1, wherein said preferred
2 channel has a demonstrative identification property and an authenticity property

1 29. (Previously Presented) The computer-readable storage medium of
2 claim 10, wherein said preferred channel has a demonstrative identification
3 property and an authenticity property.

1 30. (Previously Presented) The apparatus of claim 19, wherein said
2 preferred channel has a demonstrative identification property and an authenticity
3 property.